



Functional Independence Mathematics

Official Released Items

Grade 11

**Spring 2007
Official Released Items**

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The Grade 11 Functional Independence Mathematics Assessment was administered for the first time in Spring 2006. Beginning with this administration, the Office of Educational Assessment and Accountability (OEAA) will annually release a portion of the items that are administered on the assessment. This booklet contains released items from the Spring 2006 administration and is intended to be used by districts to assist in their interpretation of item analysis data. The information contained in this booklet may also be used by schools, teachers, and parents as a resource for understanding the content and format of the assessment items. In addition to MI-Access training materials and Extended benchmarks (EB), the released items may also have utility in informing decisions related to instruction, curriculum, and assessment. These items are **not** secure and may be copied and distributed as needed.

The table below lists the number of core and released items administered on the Spring 2007 grade 11 assessment booklet. Core items are those that count toward students' scores. All released items in this booklet were selected from the pool of core items that appeared on the assessment.

Functional Independence Mathematics Grade 11

Mathematics Strand	Number of Core Items
Patterns and Relationships	4
Geometry and Measurement	16
Data Analysis	2
Number Sense and Numeration	15
Numerical and Algebraic Operations	3
Total Core Items/Points	40
Released Items	12 (Numbers vary by strand and topic.)

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DIRECTIONS: Read each question. Choose the **BEST** answer for each question.

R1 The table below shows Sam's pay.

Pay Rates

Time	Pay
2 hours	\$6.00
3 hours	\$9.00
4 hours	\$12.00
5 hours	\$15.00
6 hours	?

If the pattern continues, what can Sam expect to be paid for working 6 hours?

- A** \$18.00
- B** \$20.00
- C** \$21.00

R2 Which unit can be used to measure a person's weight?

A pounds

B gallons

C feet

Use the calendar below to answer question **R3**.

March						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

R3 Jennifer plays piano every other day.

Jennifer played piano on Monday and Wednesday during the week.

What is the **next** day this week that Jennifer will play piano?

- A** Sunday
- B** Thursday
- C** Friday

- R4** The calendar below shows the schedule for washing dishes and mowing the lawn.

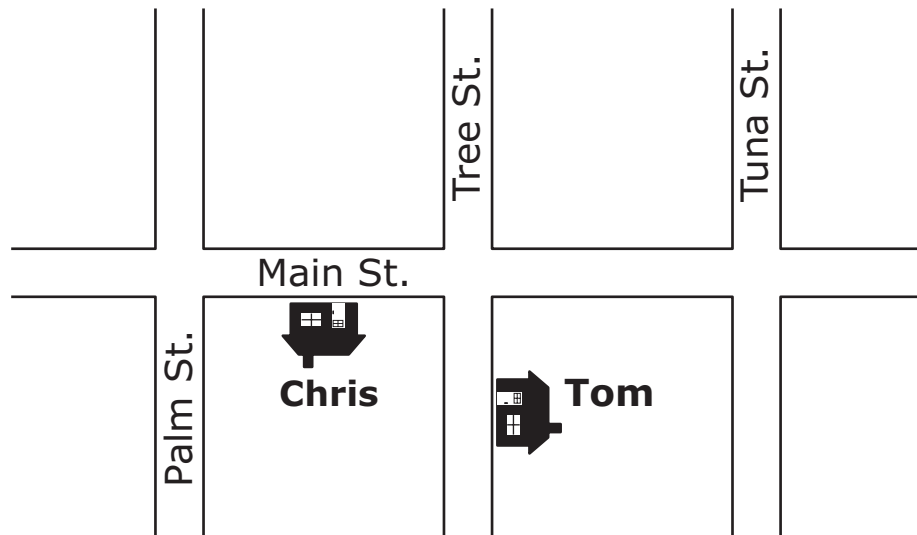
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	D 2	3	D 4	5	D 6	L 7
D 8	9	D 10	11	D 12	13	D 14 L
15	D 16	17	D 18	19	D 20	L 21
D 22	23	D 24	25	D 26	27	D 28 L
29	D 30	31				

D = wash dishes
L = mow the lawn

What is the pattern for washing dishes (D)?

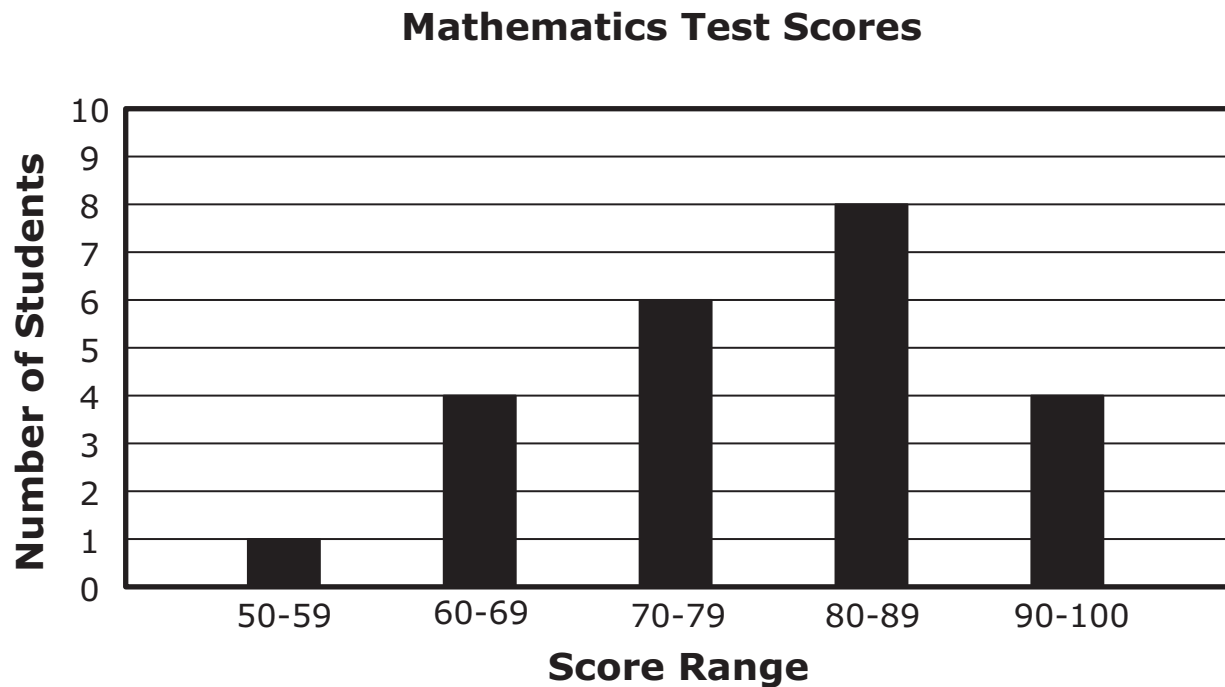
- A** every day
- B** every other day
- C** once per week

Use the map below to answer question **R5**.



- R5** Which set of directions will get you from Chris's house to Tom's house?
- A** Turn right on Main Street. Turn right on Tree Street. Tom's house will be on the left.
 - B** Turn right on Main Street. Turn left on Tree Street. Tom's house will be on the right.
 - C** Turn left on Main Street. Turn right on Tree Street. Tom's house will be on the left.

- R6** The bar graph below shows the scores students got on a mathematics test.



In which score range did the **most** students score?

- A** 50 - 59
- B** 60 - 69
- C** 80 - 89

R7 Rose went shopping.

She bought the items below:

Scarf **\$23**

Shirt **\$27**

Pants **\$35**

Shoes **\$21**

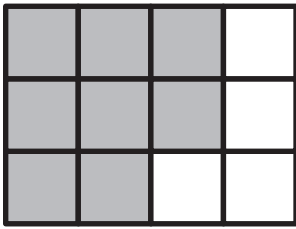
Which item cost **more** than the shirt?

A Pants

B Scarf

C Shoes

- R8** Pete cut a cake into 12 pieces and then ate 4 pieces.



What fraction of the cake is **left**?

A $\frac{4}{12}$

B $\frac{6}{12}$

C $\frac{8}{12}$

- R9** A piece of paper is folded in half.

Which fraction is **equal** to $\frac{1}{2}$?

A $\frac{3}{5}$

B $\frac{4}{9}$

C $\frac{5}{10}$

- R10** Harold buys 4 oranges for \$0.49 each, 2 bananas for \$0.19 each, and 1 candy bar for \$0.69.

What is the total cost of his food?

- A** \$1.37
- B** \$1.96
- C** \$3.03

-
- R11** Paul and Victor shared a pizza.

The pizza was divided into 8 equal slices.

Paul ate half of the pizza.

How many slices of pizza did Paul eat?

- A** 2
- B** 4
- C** 6

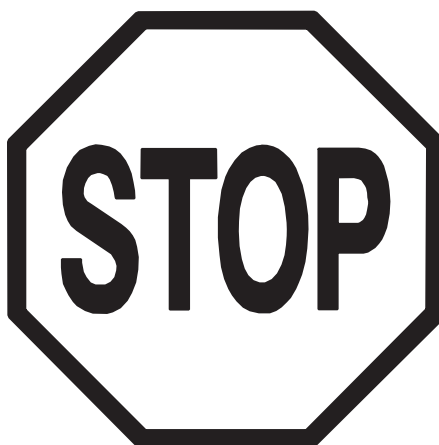
R12 Hank drives 135 miles in 3 hours.

What is his average speed in miles per hour?

- A** 135 miles per hour
- B** 132 miles per hour
- C** 45 miles per hour



Do Not Continue.

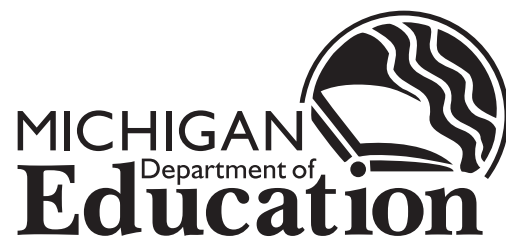


Do not continue until instructed to do so.

Below is a list of the Extended benchmarks (EB) for each released item found in this booklet. The chart contains the EB code, a brief description of what is measured, and the correct answer for each released item.

Full descriptions of the EB contained in the chart below are available for review and download at **www.mi.gov/mi-access**.

Released Item number	EB Code	STRAND or Abbreviated Extended Benchmark Descriptor	Answer Key
		Patterns And Relationships	
R1	F.11.EB03	Identify, describe and extend patterns found in daily life	A
		Geometry and Measurement	
R2	G.11.EB02	Select units of measure	A
R3	G.11.EB12	Use a calendar	C
R4	G.11.EB13	Interpret schedules	B
R5	G.11.EB20	Use maps and grids with legends	A
		Data and Probability	
R6	D.11.EB01	Read Data	C
		Number sense and Numeration	
R7	N.11.EB04	Compare and order numbers to 100,000	A
R8	N.11.EB13	Recognize, name and represent, and write fractions	C
R9	N.11.EB13	Recognize, name and represent, and write fractions	C
R10	N.11.EB18	Add, subtract, multiply, and divide decimal fractions	C
R11	N.11.EB20	Select numbers to solve problems	B
		Numerical and Algebraic Operations	
R12	A.11.EB01	Solve applied problems involving rates	C



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